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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,620

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Richard Doil Lane

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QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

STANLEY, MARK P

ART UNIT

PAPER NUMBER

4157

NOTIFICATION DATE

DELIVERY MODE

01/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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kascanla@qualcomm.com
nanm@qualcomm.com

Office Action Summary	Application No. 10/798,620	Applicant(s) LANE, RICHARD DOIL	
	Examiner MARK P. STANLEY	Art Unit 4157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-123 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-123 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

2. Claims 15, 18-19, 39, 42-43, 63, 66-67, 91-92, 122-123 are objected to because of the following informalities:

The abbreviations VGA, CIF, and QCIF are used without prior antecedent description of the abbreviations in the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-12, 14, 20, 22-36, 38, 44, 46-60, 62, 68, 70-90, and 93-121 are rejected under 35 U.S.C. 102(b) as being anticipated by Paz et al. (WO 00/07083 hereinafter Paz).

Regarding claim 1, Paz discloses "an apparatus, operable in communication system, comprising: an encode manager for receiving a multimedia stream; and an encoder system for re-encoding the received stream using a encoding parameter set to render an encoded stream with principles set forth by the encoding parameter set,

wherein the encoding parameter set is determined based a encoding scheme” (page 14, lines 18-43, page 15, lines 1-8, Fig. 3, where the encoding schemes are based on the parameter set page 25, lines 17-33, page 26, lines 1-6).

Regarding claim 2, Paz discloses "the apparatus of claim 1, wherein the encoding scheme is selected from group consisting of a scheme based on a system bandwidth, a scheme based on available system bandwidth a scheme based on a wireless receiver capability, a scheme based on a number of users requesting a specific multimedia stream at a designated QoS, a scheme based on a multimedia data type, a scheme based on a user preference and a scheme based on characteristics of a mobile station” (page 20, lines 19-21, describe the use of compressing different data types, page 24, lines 6-20, describe the use of bandwidth).

Regarding claim 3, Paz discloses "the apparatus of claim 2, wherein the scheme based on user preference is used to generate a billing information” (page 25, lines 17-33, page 26, lines 1-6, where page 26, line 4 states limitations imposed by a user on the bandwidth or quality).

Regarding claim 4, Paz discloses "the apparatus of claim 2, wherein the scheme based on multimedia data type is used to generate a billing information” (page 25, lines 17-33, page 26, lines 1-6, describes creating characteristics for creating billing

information, where page 20, lines 19-21, describes the use of compressing different data types).

Regarding claim 5, Paz discloses “the apparatus of claim 2, further comprising an encoder for executing the encoder parameter set based on encoding scheme” (page 11, lines 20-33, page 12, lines 1-4, Fig. 2 shows the use of compressors/encoders).

Regarding claim 6, Paz discloses “the apparatus of claim 2, further comprising a plurality of encoders, each for executing the encoder parameter set based on encoding scheme” (page 12, lines 11-16, where described is the use of a single encoder or multiple encoders).

Regarding claim 7, Paz discloses “the apparatus of claim 2, further comprising a bandwidth manager for determining the available bandwidth for a requested multimedia stream” (page 24, lines 6-20, where it is inherent a bandwidth manager must be in the apparatus to perform the bandwidth management).

Regarding claim 8, Paz discloses “the apparatus of claim 1, further comprising a decoder for receiving the multimedia stream at a decoder and decoding the received stream to render decoded stream” (Fig. 2, it is inherent that a decoder must be used to decode the received data before compressing the data to send to the user).

Regarding claim 9, the claim has been analyzed and rejected for the same reasoning as claim 7 above.

Regarding claim 10, the claim has been analyzed and rejected for the same reasoning as claim 5 above.

Regarding claim 11, Paz discloses “the apparatus of claim 1, further comprising transceiver for transmitting the re-encoded stream” (Fig. 2, it is inherent that a transceiver must be used in item 38 the mixing box for receiving and sending input from and to the user).

Regarding claim 12, Paz discloses “the apparatus of claim 1 wherein the encoding system providing an output configurable for handheld devices that require a first frame rate and a first bandwidth” (page 19, lines 18-33, page 20, lines 1-3, where the transmitted information is at a set bandwidth and frame rate intended for the receiving device)

Regarding claim 14, Paz discloses “the apparatus of claim 1, wherein the received stream having a first resolution and the encoding system re-encoding the received stream to second resolution, first frame rate and first bandwidth” (page 15, lines 6-20, the resolution and frame rate is adjusted for the TV display of the user).

Regarding claim 20, Paz discloses “the apparatus of claim 1, further comprising a computer configured to receive the multimedia stream from a mobile station” (page 34, lines 31-33, page 35, lines 1-2 describes the use of a satellite or wireless transmission system, where it is inherent the wireless and satellite system must be able to receive multimedia streams from a mobile station).

Regarding claim 22, Paz discloses “the apparatus of claim 1, wherein the multimedia stream is received using an over the air communication air interface” (page 34, lines 31-33, page 35, lines 1-2, where it is inherent when the multimedia stream is received by a satellite or wireless system, it is an over the air communication air interface).

Regarding claim 23, Paz discloses “the apparatus of claim 1, wherein the multimedia stream is received using an internet connection” (Fig. 1, item 16 the server receives the stream via item 18 the internet).

Regarding claim 24, Paz discloses “the apparatus of claim 1, further comprising a customer manager for generating a billing information based on user's preference” (page 25, lines 17-33, page 26, lines 1-6, where a billing system is used based on a user's preference, it is inherent that a customer manager must be used for controlling billing information).

Regarding claims 25, 49, 93, 73, 80-81, 93, 102, and 112, the claims have been analyzed and rejected for the same reasoning as claim 1 above.

Regarding claims 26, 50, 74, 82-87, 94-97, 101, 103-107, 111, and 113-118, the claims have been analyzed and rejected for the same reasoning as claim 2 above.

Regarding claims 27, 51, 75, 88, 98, 108, and 119, the claims have been analyzed and rejected for the same reasoning as claim 3 above.

Regarding claims 28, 52, 76, 89, 99, 109, and 120, the claims have been analyzed and rejected for the same reasoning as claim 4 above.

Regarding claims 29, 53, and 77, the claims have been analyzed and rejected for the same reasoning as claim 5 above.

Regarding claims 30, 54, and 78, the claims have been analyzed and rejected for the same reasoning as claim 6 above.

Regarding claims 31, 55, and 79, the claims have been analyzed and rejected for the same reasoning as claim 7 above.

Regarding claims 32 and 56, the claims have been analyzed and rejected for the same reasoning as claim 8 above.

Regarding claims 33, and 57, the claims have been analyzed and rejected for the same reasoning as claim 9 above.

Regarding claims 34, and 58, the claims have been analyzed and rejected for the same reasoning as claim 10 above.

Regarding claims 35, and 59, the claims have been analyzed and rejected for the same reasoning as claim 11 above.

Regarding claims 36, and 60, the claims have been analyzed and rejected for the same reasoning as claim 12 above.

Regarding claims 38, and 62, the claims have been analyzed and rejected for the same reasoning as claim 14 above.

Regarding claims 44, and 68, the claims have been analyzed and rejected for the same reasoning as claim 20 above.

Regarding claims 46, and 70, the claims have been analyzed and rejected for the same reasoning as claim 22 above.

Regarding claims 47, and 71, the claims have been analyzed and rejected for the same reasoning as claim 23 above.

Regarding claims 48, and 72, the claims have been analyzed and rejected for the same reasoning as claim 24 above.

Regarding claims 90, Paz discloses “the system of claim 86, wherein mobile receiver capabilities are used to generate billing information” (page 25, lines 17-33, page 26, lines 1-6, where it is inherent when the receiver is mobile the capabilities of the receiver are used for determining the billing characteristics listed on page 26, lines 3-4).

Regarding claims 100, 110, and 121, the claims have been analyzed and rejected for the same reasoning as claim 90 above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2626

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: (*See MPEP Ch. 2141*)

- a. Determining the scope and contents of the prior art;
- b. Ascertaining the differences between the prior art and the claims in issue;
- c. Resolving the level of ordinary skill in the pertinent art; and
- d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

4. Claims 13, 21, 37, 45, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paz et al. (WO 00/07083 hereinafter Paz).

Regarding claims 13, 37, and 61, Paz discloses “the apparatus of claim 12” where the frame rate and bandwidth is used as modifiable parameters (page 19, lines 18-33, page 20, lines 1-3), but does not explicitly state, “wherein: the first frame rate is 10 frames per second; and the first bandwidth is within 16 kilo bits per second”. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a compatible frame rate and bandwidth commonly used for handheld devices. One would have done so for improved used of bandwidth by limiting video quality and bandwidth used in communications with a handheld device where available bandwidth is highly limited.

Regarding claims 21, 45, and 69, Paz discloses “a wireless communication system” (page 34, lines 31-33, page 35, lines 1-2) and the use of telephone and video conferencing (page 23, lines 13-17), but does not explicitly state the use of a mobile

Art Unit: 2626

phone. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a mobile phone for communications within the wireless communications system of Paz. One would have been motivated to do so for improved versatility of the communications system by providing data communications to mobile phones.

5. Claims 15-19, 39-43, 63-67, 91-92, and 122-123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paz et al. (WO 00/07083 hereinafter Paz) in view of Karczewicz et al. (US 6,735,249 B1 hereinafter Karczewicz).

Regarding claims 15-19, 39-43, and 63-67 Paz discloses compressing/encoding (page 41, lines 12-24) once the parameters for controlling bandwidth, frames per second, and resolution are set (page 19, lines 18-33, page 20, lines 1-3), but does not explicitly state the resolution being smaller than QCIF or larger than CIF, and the exact frames per second, bandwidth being used.

However, Karczewicz discloses the use compression with QCIF and CIF in a communications system with limited bandwidth for transmission of data to handheld devices (col. 1, lines 58-67, col. 2, lines 1-7), where the bandwidth is in the range of 16 to 64 kilobits and the frames per second is within the range 10 to 15 (col. 3, lines 34-44).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the compression with QCIF and CIF of Karczewicz with the

compression based on set parameters in the communications system of Paz. One would have been motivated to do so for improved compression of data for transmitting to mobile devices over a bandwidth limited system.

Regarding claims 91, and 122, the claims have been analyzed and rejected for the same reasoning as claims 14 and 18 above.

Regarding claims 92, and 123, the claims have been analyzed and rejected for the same reasoning as claims 14 and 17 above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hinchley et al. (US 6,490,250 B1) – multimedia encoding system

Demos (US 6,957,350 B1) – resolution layering of compressed image frames for advanced television

Geiger et al. (US 6,885,319 B2) – optimal compression using multiple data compression engines

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK P. STANLEY whose telephone number is

Art Unit: 2626

(571)270-3757. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark P Stanley/
/ABUL K. AZAD/
Primary Examiner, Art Unit 2626